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August 12, 2014

Shimon Mizrahi  
Rainier Commons LLC  
918 S. Horton Street, Suite 1018  
Seattle, WA 98134

**Subject:** Catch Basin Sampling for IPWP1- During Work  
Aqueous and Sediment Sampling  
Rainier Commons, LLC

**Site Address:** 3100 Airport Way S, Seattle, WA  
  
NVL Project#: 2012-494

Dear Mr. Mizrahi:

Rainier Commons, LLC retained NVL Laboratories to conduct the sampling at their Old Rainier Brewery site located at 3100 Airport Way South, Seattle, Washington and this letter has been prepared to convey the results.

NVL Labs conducted the during-work round of sampling on July 1<sup>st</sup>, 2014. The samples were collected at roughly 1:00 PM. No precipitation had occurred that day (<http://www.nws.noaa.gov>). NVL Labs proceeded to open and inspect the catch basins referred to as CB1 and CB3 as well as the manhole referred to as MH6 on the attached figure (attachment A). These stormwater collection points are located west of building 13, where the work associated with the IPWP was in progress.

At the time of the sampling, following removal of the storm drain grates, CB1 was found to be dry with no stormwater present, but with adequate sediment present. Both water and sediment adequate for sampling were present in CB3. MH6 was found to have neither water nor sediment adequate for sampling. Accordingly, a sediment sample was collected from CB1, both sediment and aqueous samples were collected from CB3, and no samples were collected from MH6. Photos of the exposed catch basins and manhole were taken to document their condition. (See Attachment B)

Sampling Location	Stormwater Present?	Aqueous Sample Collected?	Sediment Present?	Sediment Sample Collected?
Catch Basin 1	No	No	Yes	Yes
Catch Basin 3	Yes	Yes	Yes	Yes
Man Hole 6	No	No	No	No

Samples were collected as per the Condition 6: Catch Basin Sampling Plan for IPWP1.

The samples were transported to Fremont Analytical Laboratories under a chain-of-custody protocol before being analyzed for PCBs by EPA Method 8082. Additionally, the sediment samples were also analyzed for the presence of the metals contained in the blasting media being utilized for the abatement work; Chromium (Cr), Copper (Cu), Nickel (Ni), and Zinc (Zn).

Phone: 206 547.0100 | Fax: 206 634.1936 | Toll Free: 1.888.NVL.LABS (685.5227)  
4708 Aurora Avenue North | Seattle, WA 98103-6516

**RCLLC 0004777**

Attached to this letter are a copy of the laboratory reports dated July 16<sup>th</sup>, 2014, and the site plan that shows the sample locations. (Attachments C and A)

#### Aqueous Sample Results:

Laboratory analysis of the aqueous sample CB3 did not detect PCB Arochlors in the aqueous sample. Therefore, there were no exceedances of the aqueous screening limit of 0.1 micrograms per liter (mg/L) for total PCB Arochlors.

Sampling Location	Aqueous PCB Screening Limit (Total Arochlors)	Sample Result	Result Above Screening Limit?
Catch Basin 3	.1 mg/L	Non Detect	NO

#### Sediment Sample Results:

##### PCBs:

Laboratory analysis of the sediment samples from CB1 and CB3 found detectable levels of PCB Arochlors in the samples collected from both CB1 and CB3. Total PCB concentrations of 8.35 parts per million (ppm) were detected in the sample collected from CB1. Total PCB concentrations of 5.74 ppm were detected in the sample collected from CB3. Both of these sediment PCB concentrations are above the sediment screening limit of 1.0 ppm for total PCB Arochlors.

Sampling Location	Sediment PCB Screening Limit (Total Arochlors)	Sample Result Total Arochlors	Result Above Screening Limit?
Catch Basin 1	1.0 ppm	8.35 ppm	YES
Catch Basin 3	1.0 ppm	5.74 ppm	YES

The total PCB concentrations were consistent with or not notably higher in magnitude than the pre-work sampling round which showed concentrations of 9.88 ppm in CB1 and 4.33 ppm in CB3.

Metals:

Laboratory analysis of the sediment samples from CB1 and CB3 found detectable levels of metals in the samples collected from both CB1 and CB3.

*Chromium (Cr)*

Sampling Location	Sample Result
Catch Basin 1	109 ppm
Catch Basin 3	92.9 ppm

*Copper (Cu)*

Sampling Location	Sample Result
Catch Basin 1	181 ppm
Catch Basin 3	211 ppm

*Nickel (Ni)*

Sampling Location	Sample Result
Catch Basin 1	62.4 ppm
Catch Basin 3	70.3 ppm

*Zinc (Zn)*

Sampling Location	Sample Result
Catch Basin 1	912 ppm
Catch Basin 3	1,330 ppm

Prepared By



Marcus Gladden  
Industrial Hygienist  
NVL Laboratories

Reviewed By

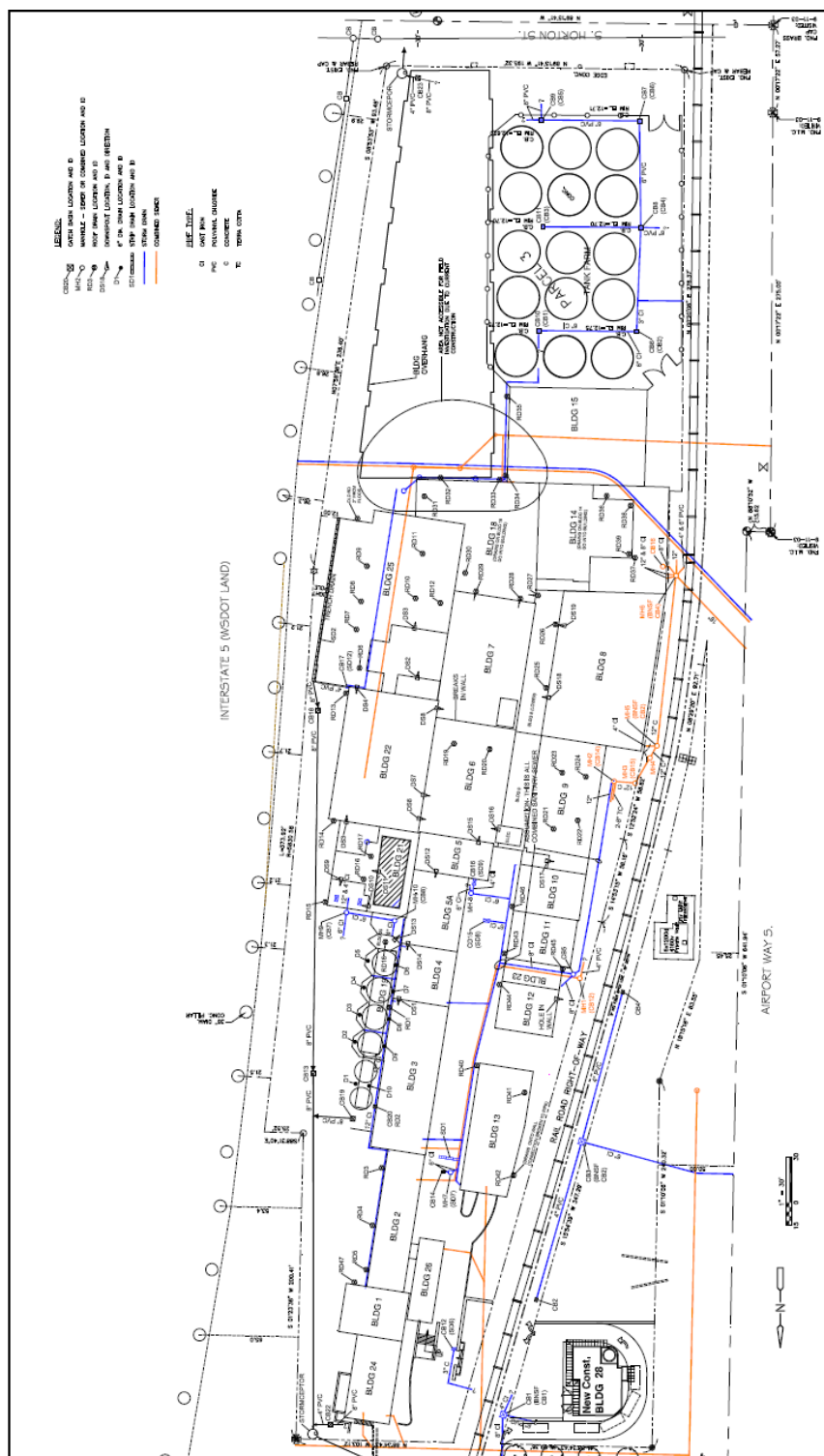


Munaf Khan  
Project Manager  
Laboratory Director / President

Attachments:

- A: Site Map with Sample Locations
- B: Site Observation Photos
- C: Laboratory Testing Report, Fremont Analytical Labs Batch No. 1407073

## Attachment A: Site Map



## Attachment B: Site Observation Photos



**Catch Basin 1**  
No standing water was observed in catch basin 1. A sediment sample was collected here.



**Catch Basin 3**  
Standing water was observed in catch basin 3.



**Man Hole 6**  
No standing water or significant accumulation of sediment was found in MH6 at the time of sampling.



# Attachment C: Laboratory Testing Report, Fremont Analytical Labs Batch No. 1407073



3600 Fremont Ave. N.  
Seattle, WA 98103  
T: (206) 352-3790  
F: (206) 352-7178  
info@fremontanalytical.com

**NVL Labs, Inc.**  
Munaf Khan  
4708 Aurora Ave. N.  
Seattle, WA 98103

**RE: Rainier Commons**  
**Lab ID: 1407073**

July 16, 2014

**Attention Munaf Khan:**

Fremont Analytical, Inc. received 3 sample(s) on 7/8/2014 for the analyses presented in the following report.

***Polychlorinated Biphenyls (PCB) by EPA 8082***  
***Sample Moisture (Percent Moisture)***  
***Total Metals by EPA Method 6020***

This report consists of the following:

- Case Narrative
- Analytical Results
- Applicable Quality Control Summary Reports
- Chain of Custody

All analyses were performed consistent with the Quality Assurance program of Fremont Analytical, Inc. Please contact the laboratory if you should have any questions about the results.

Thank you for using Fremont Analytical.

Sincerely,

A handwritten signature in black ink, appearing to read "M. Dee", is written below the word "Sincerely,".

Michael Dee  
Sr. Chemist / Principal





Date: 07/16/2014

**CLIENT:** NVL Labs, Inc.  
**Project:** Rainier Commons  
**Lab Order:** 1407073

## Work Order Sample Summary

Lab Sample ID	Client Sample ID	Date/Time Collected	Date/Time Received
1407073-001	7114-CB1-S	07/01/2014 12:00 PM	07/08/2014 4:07 PM
1407073-002	7114-CB3-S	07/01/2014 12:00 PM	07/08/2014 4:07 PM
1407073-003	7114-CB3-A	07/01/2014 12:00 PM	07/08/2014 4:07 PM

Note: If no "Time Collected" is supplied, a default of 12:00AM is assigned



**CLIENT:** NVL Labs, Inc.  
**Project:** Rainier Commons

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**I. SAMPLE RECEIPT:**

Samples receipt information is recorded on the attached Sample Receipt Checklist.

**II. GENERAL REPORTING COMMENTS:**

Results are reported on a wet weight basis unless dry-weight correction is denoted in the units field on the analytical report ("mg/kg-dry" or "ug/kg-dry").

Matrix Spike (MS) and MS Duplicate (MSD) samples are tested from an analytical batch of "like" matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. The sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The LCS and the MB are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

**III. ANALYSES AND EXCEPTIONS:**

Exceptions associated with this report will be footnoted in the analytical results page(s) or the quality control summary page(s) and/or noted below.



# Analytical Report

WO#: 1407073

Date Reported: 7/16/2014

Client: NVL Labs, Inc.

Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-001

Matrix: Soil

Client Sample ID: 7114-CB1-S

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Polychlorinated Biphenyls (PCB) by EPA 8082**

Batch ID: 8071

Analyst: DB

Aroclor 1016	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1221	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1232	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1242	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1248	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1254	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1260	8.35	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1262	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Aroclor 1268	ND	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Total PCBs	8.35	0.213		mg/Kg-dry	1	7/15/2014 7:00:00 PM
Surr: Decachlorobiphenyl	128	50.2-159		%REC	1	7/15/2014 7:00:00 PM
Surr: Tetrachloro-m-xylene	89.6	60.3-134		%REC	1	7/15/2014 7:00:00 PM

**Total Metals by EPA Method 6020**

Batch ID: 8053

Analyst: TN

Chromium	109	0.167		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Copper	181	0.334		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Nickel	62.4	0.167		mg/Kg-dry	1	7/9/2014 5:17:02 PM
Zinc	912	0.835		mg/Kg-dry	1	7/9/2014 5:17:02 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R15475

Analyst: KZ

Percent Moisture	55.3			wt%	1	7/9/2014 8:51:37 AM
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Qualifiers:	B	Analyte detected in the associated Method Blank	D	Dilution was required
	E	Value above quantitation range	H	Holding times for preparation or analysis exceeded
	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1407073

Date Reported: 7/16/2014

Client: NVL Labs, Inc.

Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-002

Matrix: Soil

Client Sample ID: 7114-CB3-S

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Polychlorinated Biphenyls (PCB) by EPA 8082**

Batch ID: 8071

Analyst: DB

Aroclor 1016	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1221	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1232	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1242	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1248	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1254	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1260	5.74	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1262	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Aroclor 1268	ND	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Total PCBs	5.74	0.298		mg/Kg-dry	1	7/15/2014 7:39:00 PM
Surr: Decachlorobiphenyl	106	50.2-159		%REC	1	7/15/2014 7:39:00 PM
Surr: Tetrachloro-m-xylene	87.5	60.3-134		%REC	1	7/15/2014 7:39:00 PM

**Total Metals by EPA Method 6020**

Batch ID: 8053

Analyst: TN

Chromium	92.9	0.264		mg/Kg-dry	1	7/9/2014 5:20:28 PM
Copper	211	0.528		mg/Kg-dry	1	7/9/2014 5:20:28 PM
Nickel	70.3	0.264		mg/Kg-dry	1	7/9/2014 5:20:28 PM
Zinc	1,330	1.32		mg/Kg-dry	1	7/9/2014 5:20:28 PM

**Sample Moisture (Percent Moisture)**

Batch ID: R15475

Analyst: KZ

Percent Moisture	71.5			wt%	1	7/9/2014 8:51:37 AM
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**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



# Analytical Report

WO#: 1407073

Date Reported: 7/16/2014

Client: NVL Labs, Inc.

Collection Date: 7/1/2014 12:00:00 PM

Project: Rainier Commons

Lab ID: 1407073-003

Matrix: Water

Client Sample ID: 7114-CB3-A

Analyses	Result	RL	Qual	Units	DF	Date Analyzed
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**Polychlorinated Biphenyls (PCB) by EPA 8082**

Batch ID: 8079

Analyst: NG

Aroclor 1016	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1221	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1232	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1242	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1248	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1254	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1260	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1262	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Aroclor 1268	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Total PCBs	ND	0.222		µg/L	1	7/14/2014 10:49:00 AM
Surr: Decachlorobiphenyl	95.1	45.1-140		%REC	1	7/14/2014 10:49:00 AM
Surr: Tetrachloro-m-xylene	59.0	42.1-101		%REC	1	7/14/2014 10:49:00 AM

**Qualifiers:** B Analyte detected in the associated Method Blank  
E Value above quantitation range  
J Analyte detected below quantitation limits  
RL Reporting Limit

D Dilution was required  
H Holding times for preparation or analysis exceeded  
ND Not detected at the Reporting Limit  
S Spike recovery outside accepted recovery limits



Date: 7/16/2014

Work Order: 1407073  
CLIENT: NVL Labs, Inc.  
Project: Rainier Commons

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID: <b>MB-8053</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>7/8/2014</b>			RunNo: <b>15500</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>8053</b>	Analysis Date: <b>7/9/2014</b>							SeqNo: <b>313765</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	ND	0.100									
Copper	ND	0.200									
Nickel	ND	0.100									
Zinc	ND	0.400									

Sample ID: <b>LCS-8053</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>7/8/2014</b>			RunNo: <b>15500</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>8053</b>	Analysis Date: <b>7/9/2014</b>							SeqNo: <b>313766</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	75.6	0.100	62.90	0	120	67.9	132				
Copper	85.1	0.200	84.20	0	101	74	125.9				
Nickel	317	0.100	301.0	0	105	74.4	125.6				
Zinc	461	0.400	425.0	0	108	72.7	127.3				

Sample ID: 1407068-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 7/8/2014			RunNo: 15500		
Client ID: BATCH	Batch ID: 8053	Analysis Date: 7/9/2014						SeqNo: 313768			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	47.7	0.0839						50.71	6.21	30	
Copper	30.7	0.168						33.07	7.31	30	
Nickel	50.1	0.0839						51.45	2.75	30	
Zinc	65.8	0.336						68.61	4.20	30	

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 7/16/2014

Work Order: 1407073  
CLIENT: NVL Labs, Inc.  
Project: Rainier Commons

**QC SUMMARY REPORT**  
**Total Metals by EPA Method 6020**

Sample ID: <b>1407068-001AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>				Prep Date: <b>7/8/2014</b>			RunNo: <b>15500</b>		
Client ID: <b>BATCH</b>	Batch ID: <b>8053</b>	Analysis Date: <b>7/9/2014</b>						SeqNo: <b>313770</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	89.3	0.0833	41.64	50.71	92.7	75	125				
Copper	68.9	0.167	41.64	33.07	86.0	75	125				
Nickel	89.8	0.0833	41.64	51.45	92.2	75	125				
Zinc	104	0.333	41.64	68.61	85.6	75	125				

Sample ID: <b>1407068-001AMSD</b>	SampType: <b>MSD</b>	Units: <b>mg/Kg-dry</b>				Prep Date: <b>7/8/2014</b>			RunNo: <b>15500</b>		
Client ID: <b>BATCH</b>	Batch ID: <b>8053</b>	Analysis Date: <b>7/9/2014</b>							SeqNo: <b>313771</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Chromium	93.4	0.0846	42.28	50.71	101	75	125	89.33	4.45	30	
Copper	68.3	0.169	42.28	33.07	83.4	75	125	68.90	0.808	30	
Nickel	90.7	0.0846	42.28	51.45	92.8	75	125	89.85	0.915	30	
Zinc	106	0.338	42.28	68.61	88.6	75	125	104.3	1.71	30	

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 7/16/2014

Work Order: 1407073  
CLIENT: NVL Labs, Inc.  
Project: Rainier Commons

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID: <b>LCS-8071</b>	SampType: <b>LCS</b>	Units: <b>mg/Kg</b>				Prep Date: <b>7/9/2014</b>			RunNo: <b>15587</b>		
Client ID: <b>LCSS</b>	Batch ID: <b>8071</b>					Analysis Date: <b>7/15/2014</b>			SeqNo: <b>315777</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	0.716	0.100	1.000	0	71.6	65.8	117				
Aroclor 1260	0.649	0.100	1.000	0	64.9	57	134				
Surr: Decachlorobiphenyl	46.0		50.00		92.1	50.2	159				
Surr: Tetrachloro-m-xylene	44.3		50.00		88.6	60.3	134				

Sample ID: 1407073-001ADUP	SampType: DUP	Units: mg/Kg-dry				Prep Date: 7/9/2014			RunNo: 15587		
Client ID: 7114-CB1-S	Batch ID: 8071	Analysis Date: 7/15/2014						SeqNo: 315779			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.202						0		30	
Aroclor 1221	ND	0.202						0		30	
Aroclor 1232	ND	0.202						0		30	
Aroclor 1242	ND	0.202						0		30	
Aroclor 1248	ND	0.202						0		30	
Aroclor 1254	ND	0.202						0		30	
Aroclor 1260	7.66	0.202						8.347	8.54	30	
Aroclor 1262	ND	0.202						0		30	
Aroclor 1268	ND	0.202						0		30	
Total PCBs	7.66	0.202						8.347	8.54	30	
Surr: Decachlorobiphenyl	74.1		101.1		73.3	50.2	159		0		
Surr: Tetrachloro-m-xylene	83.1		101.1		82.2	60.3	134		0		

Sample ID: <b>MB-8071</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>7/9/2014</b>			RunNo: <b>15587</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>8071</b>					Analysis Date: <b>7/15/2014</b>			SeqNo: <b>315783</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.100									
Aroclor 1221	ND	0.100									

**Qualifiers:** B Analyte detected in the associated Method Blank D Dilution was required E Value above quantitation range  
H Holding times for preparation or analysis exceeded J Analyte detected below quantitation limits ND Not detected at the Reporting Limit  
R RPD outside accepted recovery limits RL Reporting Limit S Spike recovery outside accepted recovery limits



**Work Order:** 1407073  
**CLIENT:** NVL Labs, Inc.  
**Project:** Rainier Commons

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID: <b>MB-8071</b>	SampType: <b>MBLK</b>	Units: <b>mg/Kg</b>				Prep Date: <b>7/9/2014</b>			RunNo: <b>15587</b>		
Client ID: <b>MBLKS</b>	Batch ID: <b>8071</b>	Analysis Date: <b>7/15/2014</b>						SeqNo: <b>315783</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1232	ND	0.100									
Aroclor 1242	ND	0.100									
Aroclor 1248	ND	0.100									
Aroclor 1254	ND	0.100									
Aroclor 1260	ND	0.100									
Aroclor 1262	ND	0.100									
Aroclor 1268	ND	0.100									
Total PCBs	ND	0.100									
Surr: Decachlorobiphenyl	49.7		50.00		99.3	50.2	159				
Surr: Tetrachloro-m-xylene	46.1		50.00		92.2	60.3	134				

Sample ID: <b>1407073-002AMS</b>	SampType: <b>MS</b>	Units: <b>mg/Kg-dry</b>				Prep Date: <b>7/9/2014</b>			RunNo: <b>15587</b>		
Client ID: <b>7114-CB3-S</b>	Batch ID: <b>8071</b>	Analysis Date: <b>7/15/2014</b>						SeqNo: <b>315784</b>			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	4.27	0.307	3.072	0	139	61.7	139				
Aroclor 1260	7.00	0.307	3.072	6.085	29.9	63.1	138				S
Surr: Decachlorobiphenyl	170		153.6		111	50.2	159				
Surr: Tetrachloro-m-xylene	146		153.6		95.1	60.3	134				

**NOTES:**

S - Spike recovery indicates a possible matrix effect. The method is in control as indicated by the Laboratory Control Sample (LCS).

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits

**Work Order:** 1407073  
**CLIENT:** NVL Labs, Inc.  
**Project:** Rainier Commons

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID: <b>MB-8079</b>	SampType: <b>MBLK</b>	Units: <b>µg/L</b>				Prep Date: <b>7/10/2014</b>			RunNo: <b>15574</b>		
Client ID: <b>MBLKW</b>	Batch ID: <b>8079</b>	Analysis Date: <b>7/14/2014</b>							SeqNo: <b>315563</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.200									
Aroclor 1221	ND	0.200									
Aroclor 1232	ND	0.200									
Aroclor 1242	ND	0.200									
Aroclor 1248	ND	0.200									
Aroclor 1254	ND	0.200									
Aroclor 1260	ND	0.200									
Aroclor 1262	ND	0.200									
Aroclor 1268	ND	0.200									
Total PCBs	ND	0.200									
Surr: Decachlorobiphenyl	299		400.0		74.8	45.1	140				
Surr: Tetrachloro-m-xylene	145		400.0		36.2	42.1	101				S

**NOTES:**

S - Surrogate outside recovery limits. Minimum method criterion of one surrogate within established recovery limits was met.

Sample ID: <b>LCS-8079</b>	SampType: <b>LCS</b>	Units: <b>µg/L</b>				Prep Date: <b>7/10/2014</b>			RunNo: <b>15574</b>		
Client ID: <b>LCSW</b>	Batch ID: <b>8079</b>					Analysis Date: <b>7/14/2014</b>			SeqNo: <b>315564</b>		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.36	0.200	2.000	0	67.8	41.4	118				
Aroclor 1260	1.54	0.200	2.000	0	77.0	56	119				
Surr: Decachlorobiphenyl	436		400.0		109	45.1	140				
Surr: Tetrachloro-m-xylene	228		400.0		57.0	42.1	101				

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



Date: 7/16/2014

Work Order: 1407073  
CLIENT: NVL Labs, Inc.  
Project: Rainier Commons

**QC SUMMARY REPORT**  
**Polychlorinated Biphenyls (PCB) by EPA 8082**

Sample ID: 1407073-003AMS	SampType: MS	Units: µg/L				Prep Date: 7/10/2014			RunNo: 15574		
Client ID: 7114-CB3-A	Batch ID: 8079					Analysis Date: 7/14/2014			SeqNo: 315567		
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	1.59	0.222	2.222	0	71.7	45.5	118				
Aroclor 1260	1.73	0.222	2.222	0	78.1	50.8	129				
Surr: Decachlorobiphenyl	365		444.4		82.2	45.1	140				
Surr: Tetrachloro-m-xylene	248		444.4		55.9	42.1	101				

Sample ID: 1407096-001BDUP	SampType: DUP	Units: µg/L			Prep Date: 7/10/2014			RunNo: 15574			
Client ID: BATCH	Batch ID: 8079	Analysis Date: 7/14/2014						SeqNo: 315569			
Analyte	Result	RL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
Aroclor 1016	ND	0.327						0		30	
Aroclor 1221	ND	0.327						0		30	
Aroclor 1232	ND	0.327						0		30	
Aroclor 1242	ND	0.327						0		30	
Aroclor 1248	ND	0.327						0		30	
Aroclor 1254	ND	0.327						0		30	
Aroclor 1260	ND	0.327						0		30	
Aroclor 1262	ND	0.327						0		30	
Aroclor 1268	ND	0.327						0		30	
Total PCBs	ND	0.327						0		30	
Surr: Decachlorobiphenyl	479		653.6		73.4	45.1	140		0		
Surr: Tetrachloro-m-xylene	335		653.6		51.3	42.1	101		0		

<b>Qualifiers:</b>	B	Analyte detected in the associated Method Blank	D	Dilution was required	E	Value above quantitation range
	H	Holding times for preparation or analysis exceeded	J	Analyte detected below quantitation limits	ND	Not detected at the Reporting Limit
	R	RPD outside accepted recovery limits	RL	Reporting Limit	S	Spike recovery outside accepted recovery limits



## Sample Log-In Check List

Client Name: **NVL**

Work Order Number: **1407073**

Logged by: **Clare Griggs**

Date Received: **7/8/2014 4:07:00 PM**

### Chain of Custody

1. Is Chain of Custody complete? Yes ☒ No ☐ Not Present ☐  
2. How was the sample delivered? Client

### Log In

3. Coolers are present? Yes ☒ No ☐ NA ☐  
4. Shipping container/cooler in good condition? Yes ☒ No ☐  
5. Custody seals intact on shipping container/cooler? Yes ☐ No ☐ Not Required ☒  
6. Was an attempt made to cool the samples? Yes ☒ No ☐ NA ☐  
7. Were all coolers received at a temperature of  $>0^{\circ}\text{C}$  to  $10.0^{\circ}\text{C}$ ? Yes ☒ No ☐ NA ☐  
8. Sample(s) in proper container(s)? Yes ☒ No ☐  
9. Sufficient sample volume for indicated test(s)? Yes ☒ No ☐  
10. Are samples properly preserved? Yes ☒ No ☐  
11. Was preservative added to bottles? Yes ☐ No ☒ NA ☐  
12. Is the headspace in the VOA vials? Yes ☐ No ☐ NA ☒  
13. Did all samples containers arrive in good condition(unbroken)? Yes ☒ No ☐  
14. Does paperwork match bottle labels? Yes ☒ No ☐  
15. Are matrices correctly identified on Chain of Custody? Yes ☒ No ☐  
16. Is it clear what analyses were requested? Yes ☒ No ☐  
17. Were all holding times able to be met? Yes ☒ No ☐

### Special Handling (if applicable)

18. Was client notified of all discrepancies with this order? Yes ☐ No ☐ NA ☒

Person Notified:  Date:   
By Whom:  Via: ☐ eMail ☐ Phone ☐ Fax ☐ In Person  
Regarding:   
Client Instructions:

19. Additional remarks:

### Item Information

Item #	Temp $^{\circ}\text{C}$	Condition
Cooler	8.0	Good
Sample	13.5	



# Fremont

Analytical

3600 Fremont Ave N.  
Seattle, WA 98103

Tel: 206-352-3790  
Fax: 206-352-7178

## Chain of Custody Record

Laboratory Project No (internal): **1407073**  
Page: 1 of: 1

Date: **7/8/14**

Client: **NVL LABS**  
Address: **4708 AURORA AVE N**  
City, State, Zip: **SEATTLE, WA, 98103**

Tel: **206-547-0100**

Project Name: **RAWICR Commons**  
Location: **3100 AIRPORT WAY S SEATTLE WA 98134**  
Collected by: **MARLUS GARDEN**

Reports To (PM): **MUNAF KHAN**

Fax: **206-634-1936**

Email: **MUNAF.K@NVL.LABS.COM**

Project No: **2012-494**

Sample Name	Sample Date	Sample Time	Sample Type (Matrix)	VOC (EPA 8260)	SVOC (EPA 8210)	BTX (EPA 8210)	Gasoline Range Organics	Hydrocarbon Identification (HID)	Diesel/Heavy Oil Range Organics	EDM VOC (EPA 8210)	PAH (EPA 8210)	PCB (EPA 8210)	Q PCBs (EPA 8210)	Q PCBs (EPA 8210)	Metals (EPA 8210)	Total (T) / Dissolved (D)	Anions (V)	Comments/Depth
1 7114 - CB1 - S	7/1/14	12:00	SOIL							X		X	T					
2 7114 - CB3 - S			SOIL							X		X	T					
3 7114 - CB3 - A			H <sub>2</sub> O							X								← COMPOSITE BOTH BOTTLES 1+2 FOR SAMPLE AS WELL AS M.S. SPIKE
4																		
5																		
6																		
7																		
8																		
9																		
10																		

\* Metals Analysis (Order): MTCA-5 RCRA-8 Priority Pollutants TAL Individual: Ag Al As B Ba Be Ca Cd Co **Cu** Fe Hg K Mg Mn Mo Na **Ni** Pb Sn Sr Ti U V **Zn**

\*\* Anions (Order): Nitrate Nitrite Chloride Sulfate Bromide O-Phosphate Fluoride Nitrate-Nitrite

Sample Disposal: ☐ Return to Client ☐ Disposal by Lab (A fee may be assessed if samples are retained after 30 days)

Special Remarks:

Relinquished: Date/Time: **7/8/14**

Received: Date/Time: **7/8/14 16:07**

Relinquished: Date/Time: **7/8/14**

Received: Date/Time: **7/8/14**

TAT → Next Day 2 Day 3 Day **STD**